# Research Summary

## New Missouri Accident Location Manual

The Missouri Highway Accident Location (HAL) manual, used to identify, analyze, and correct high crash locations, had not been updated since 1999. The new 4th edition published in 2014 brings the manual up-to-date with a complete re-working of all chapters. It mirrors the *Highway Safety Manual* (HSM) (AASHTO, 2010) by incorporating its methodology of a systematic and data-driven approach to improving traffic safety.

The title of the manual was changed from *HAL* (Identification, Analysis, and Correction of High-Crash Locations) to *S-HAL* (Safety Handbook for Locals) in order to reflect current trends in highway safety. It is intended to be a comprehensive traffic safety resource for all local communities (such as cities and counties) in Missouri.

This manual can be used as a reference for specific safety-related topics such as project prioritization, crash analysis, and countermeasure selection.



The changes are both stylistic and substantive. For example, a contemporary book-type style sheet was used to improve the appearance of figures, tables, headings, and labels.

The new manual includes content changes such as the following:

- System-wide analysis vs. high-accident locations only
- Proactive rather than reactive focus
- Updated countermeasures
- Economic analysis and appraisal
- Proven safety tools, such as the Road Safety Audit or Assessment (RSA
- Easier access to electronic sources and documents

The section on countermeasures has been improved significantly through the incorporation of the HSM approach to analyzing countermeasure effectiveness. Also, the manual now incorporates a partnership-based approach to safety. This edition takes full advantage of the availability of safety information, becoming the gateway for many additional sources.

The greatest value to local communities, however, occurs through the use of this manual for setting up a comprehensive approach to local transportation safety. This allows a community to plan and execute a sustainable approach toward safety improvements.

### **S-HAL Organization**

Chapter 1. Introduction to S-HAL — A system for improving safety for all local communities

Chapter 2. Traffic records

System — Setting up a crash
database

Chapter 3. Network screening — Prioritizing safety improvements and locations

Chapter 4. Safety analysis tools — Maximizing use of the toolbox to improve safety

Chapter 5. Safety improvements — Matching countermeasures with contributing circumstances

Chapter 6. Road safety audits — A proactive approach to safety

Chapter 7. Additional resources — Utilizing the collective wisdom of others

#### **Project Information**

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**Location Manual** 

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